

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-17: (Cancelled).

Claim 18 (Currently Amended): A cooling method for cooling a substrate loaded on a placing table by supplying a coolant having a temperature lower than a target temperature into a coolant path arranged in said placing table, comprising:

loading the substrate on the placing table while setting in advance the temperature of the placing table at a temperature substantially equal to the target temperature;

~~starting the supply of the coolant in the coolant path when the substrate or the placing table changes in state~~ when the temperature of the placing table changes or a predetermined time passes after the temperature of the placing table changed, thereby cooling the placing table together with the substrate; and

unloading the substrate from the placing table after the temperature of the placing table is rendered equal to or lower than the target temperature, and heating the substrate to the target temperature in an atmosphere having a temperature substantially equal to the target temperature.

Claims 19-21 (Canceled).

Claim 22 (New): A cooling method for cooling a substrate loaded on a placing table by supplying a coolant having a temperature lower than a target temperature into a coolant path arranged in said placing table, comprising:

loading the substrate on the placing table while setting in advance the temperature of the placing table at a temperature substantially equal to the target temperature;

starting the supply of the coolant in the coolant path when the substrate is loaded on the placing table or when a predetermined time passes after the substrate was loaded on the placing table, thereby cooling the placing table together with the substrate; and

unloading the substrate from the placing table after the temperature of the placing table is rendered equal to or lower than the target temperature, and heating the substrate to the target temperature in an atmosphere having a temperature substantially equal to the target temperature.

Claim 23 (New): A cooling method for cooling a substrate loaded on a placing table by supplying a coolant having a temperature lower than a target temperature into a coolant path arranged in said placing table, comprising:

loading the substrate on the placing table while setting in advance the temperature of the placing table at a temperature substantially equal to the target temperature;

starting the supply of the coolant in the coolant path when, after the substrate is received by means of a plurality of support pins above the placing table, and the support pins are descended, or when a predetermined time passes after the support pins are descended, thereby cooling the placing table together with the substrate; and

unloading the substrate from the placing table after the temperature of the placing table is rendered equal to or lower than the target temperature, and heating the substrate to the target temperature in an atmosphere having a temperature substantially equal to the target temperature.